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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/570,038	02/27/2006	Yuji Okamoto	64985(49381)	1093
21874 7590 06/27/2011 EDWARDS ANGELL PALMER & DODGE LLP P.O. BOX 55874 BOSTON, MA 02205			EXAMINER LEWIS, LISA C	
			ART UNIT 2436	PAPER NUMBER
			MAIL DATE 06/27/2011	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/570,038	<b>Applicant(s)</b> OKAMOTO ET AL.	
	<b>Examiner</b> Lisa Lewis	<b>Art Unit</b> 2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2011.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6,9-11 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6, 9-11, and 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

Applicant's response with amendments filed 06/03/2011 has been received and entered.

Applicant has amended claims 6, 10, and 11, and has added new claims 18-21. Claims 6, 9-11, and 18-21 are presented for examination on the merits.

### ***Response to Arguments***

Applicant's arguments have been carefully considered but are not deemed persuasive of error in the rejection.

The examiner thanks the applicant for noting that the previous office action was a non-final office action, and that this was a typo.

Applicant argues that the management unit is a memory (i.e., hardware) and the image processing apparatus is accessed by the controlling unit (CPU), and this is hardware to overcome the 112 2nd rejection regarding means plus function.

The examiner respectfully disagrees. The hardware for each means in the claims must be pointed out to the examiner (what hardware is performing the means for designating, what hardware is performing means for accepting, etc.). In addition, it would be possible to overcome this rejection by associating each means with hardware. For example, "hardware means for designating...", "hardware means for detecting," etc.

Applicant further argues that the newly added claims comprise "units" so they do not invoke 112 6<sup>th</sup>.

The examiner respectfully disagrees. New guidelines have been provided to examiners that language such as "unit for", "component for", "unit configured to", etc. also invoke 112 6<sup>th</sup> paragraph, so the same rejection applies.

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Applicant further argues that the claimed invention provides an optional unit, whereas Huisman provides a backup unit. Applicant argues that the problem to be solved by Huisman is different from that of the claimed invention, so there is no motivation to combine Mutsuaki and Huisman.

The examiner respectfully disagrees. The backup unit of Huisman is an "optional" unit in that the system determines whether it wants to activate the unit based on particular conditions such as failure. Further, in response to applicants argument that the problem to be solved by Huisman is different from that of the claimed invention, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Regarding claims 6, 9-11, and 18-21, applicant uses means plus function language. These claims are rejected for lacking sufficient structure

Claim elements "means for" and "unit for" are limitations that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to clearly link or associate the disclosed structure, material, or acts to the claimed function such that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function.

Applicant may:

- (a) Amend the claim so that the claim limitation will no longer be interpreted as a limitation under 35 U.S.C. 112, sixth paragraph; or

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(b) Amend the written description of the specification such that it clearly links or associates the corresponding structure, material, or acts to the claimed function without introducing any new matter (35 U.S.C. 132(a)); or

(c) State on the record where the corresponding structure, material, or acts are set forth in the written description of the specification and linked or associated to the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

The examiner notes to the applicant: Claim limitations “means for” and “unit for” have been interpreted under 35 U.S.C. 112, sixth paragraph, because it uses a non-structural term “means” and “unit” coupled with functional language “for designating”, “for detecting”, etc. without reciting sufficient structure to achieve the function. Furthermore, the non-structural term is not preceded by a structural modifier.

Since this claim limitation invokes 35 U.S.C. 112, sixth paragraph, claims 6, 10, 11, and 18-21 are interpreted to cover the corresponding structure described in the specification that achieves the claimed function, and equivalents thereof. However, please note that sufficient structure has not been provided.

If applicant wishes to provide further explanation or dispute the examiner’s interpretation of the corresponding structure, applicant must identify the corresponding structure with reference to the specification by page and line number, and to the drawing, if any, by reference characters in response to this Office action.

If applicant does **not** wish to have the claim limitation treated under 35 U.S.C. 112, sixth paragraph, applicant may amend the claim so that it will clearly not invoke 35 U.S.C. 112, sixth paragraph, or present a sufficient showing that the claim recites sufficient structure, material, or acts for performing the claimed function to preclude application of 35 U.S.C. 112, sixth paragraph.

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For more information, see *Supplementary Examination Guidelines for Determining Compliance with 35 U.S.C. § 112 and for Treatment of Related Issues in Patent Applications*, 76 FR 7162, 7167 (Feb. 9, 2011).

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 6, 9-11, and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mutsuaki (JP 2000-244753) in view of Huisman et al. (US 2005/0108599) and Yoshiki (JP 11-275326), and further in view of Chrisop et al. (US 2001/0025343).**

4. Regarding claims 6 and 18, Matsuaki teaches an image processing apparatus including a storing unit for storing image data and performing an output process based on the image data stored in the storing unit (An image memory of a facsimile equipment is used to store image data and an image output part for outputting stored image data stored in the image memory - see abstract, for example), comprising a controller including:

a. Means for designating the image data stored in the storing unit and accepting an instruction for concealment of the designated image data (A data specifying part is used for specifying image data in the image memory and a cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.

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- b. Means for concealing the designated image data based on the accepted instruction (A cipher image encoding part is used for encoding (i.e., concealing) the specified data) - see abstract, for example.
5. Matsuaki further teaches that there is a means for concealing by encryption (i.e., processing unit) and a means for concealing by authenticating (i.e., password) - see abstract and [0014], for example.
6. Matsuaki does not teach checking that the processing unit (cipher image encoding part) is provided and active, and determining that concealing equals encryption and authentication if the unit is not active and determining that the concealing equals authentication if the unit is active.
7. Huisman et al. teach a redundancy arrangement wherein when a function with redundant backup protection is failing (i.e., unavailable or invalid), backup units are activated *when necessary* (i.e., redundancy is only provided by the backup unit when the function is failing - when the unit is failing, it may choose to activate the backup unit) - see [0046], for example.
8. Matsuaki and Huisman et al. do not teach a means for nullifying unconcealed image data.
9. Yoshiki beneficially teaches that to cope with an image storing memory being full, the oldest *non-protected* image is deleted (i.e., nullified) from the image memory - see abstract, and [0048] - [0050], for example.
10. Matsuaki, Huisman et al., and Yoshiki do not teach that the nullifying of the data comprises overwriting the image data with meaningless data whereby the image is prevented from recurring in the storing unit in reproducible form.
11. Chrisop et al. teach a method wherein image data is overwritten by zeros and ones or by random data and this can be performed a repeated number of times - see abstract, figure 1, and [0044], for example. Further Chrisop et al. teach that when deleting data or overwriting data, some of the data still resides in memory - see [0012] and [0013], for example. Christop et al. teach that it is beneficial to

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overwrite multiple times, and that several government agencies require at least three overwrites of data - see [0019].

12. It would have been obvious to one of ordinary skill in the art at to create the invention as claimed for the following reasons. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki by determining when a unit (such as an encryption unit) is failing or inactive, and providing a backup unit that takes on its function (such as encryption) only when necessary, for the purpose of reducing redundancy and providing backup protection in case of unavailability, based upon the beneficial teachings provided by Huisman et al. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to modify the teachings of Mutsuaki and Huisman et al. by allowing non-protected images to be deleted, for the purpose of freeing up memory space, based upon the beneficial teachings provided by Yoshiki. It also would have been obvious to one of ordinary skill in the art at the time of the claimed invention to modify the teachings of Mutsuaki, Huisman et al., and Yoshiki by allowing the nullification to be overwriting the image data with meaningless/random data multiple times, for the purpose of protecting the image data from being reproduced, based on the beneficial teachings provided by Chrisop et al. These modifications would result in increased security, which is an obvious benefit to the skilled artisan. Additionally, the cited references are in the field of image storing devices and encryption, as is the current application, and thus, are in analogous arts.

13. Regarding claims 9 and 19, Matsuaki teaches that:

c. The controller includes means for decoding the encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.



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14. Regarding claims 10, 11, 20, and 21 Matsuaki teaches:

- d. The controller further comprises:
  - i. Means for accepting authentication information (A password input unit) - see [0014], for example.
  - ii. Means for verifying the authentication information set to the image data with the accepted authentication information (A password judgment part judges whether the password is proper) - see [0014], for example.
  - iii. Means for permitting the output process of the image data in the case where the authentication information set to the image data matches the accepted authentication information (The image data is output if the password is proper (i.e., if the inputted password matches the correct password) - see [0014], for example.
- e. The controller decodes encrypted image data in the case of performing an output operation based on the image data (A cipher image decoding part is used for restoring cipher image data) - see abstract, for example.

### ***Conclusion***

A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art. Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary disclosure commensurate with the specific limitations being addressed. *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)). *In re: Upsher-Smith Labs. v. Pamlab, LLC*, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); *In re Fritch*, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); *In re Fracalossi*, 681 F.2d 792, 794 n.1, 215 USPQ 569, 570 n.1 (CCPA 1982); *In re Lamberti*, 545 F.2d 747, 750, 192 USPQ 278, 280 (CCPA 1976); *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

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**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lewis whose telephone number is (571) 270-7724. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nasser Moazzami can be reached on (571) 272-4195. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. L./

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Examiner, Art Unit 2436

/Nasser Moazzami/

Supervisory Patent Examiner, Art Unit 2436